

**Fort Matanzas National Monument  
Monthly Resource Management Update  
August 31, 2011**

Sea Turtle Nesting

Though Florida largely escaped the negative impacts of Hurricane Irene currently being felt farther up the east coast, the storm still managed to affect the state. At Fort Matanzas those effects came in the form of much increased high tides for several days in a row. Unfortunately, hurricane season coincides with sea turtle hatching season. So far, two nests in the park have been evaluated by staff members, per protocol, three to five days post “due date”. (Sea turtle eggs generally incubate for two months, give or take a few days, after they’ve been laid in the sand by their mothers.)

The first nest was evaluated on August 24th, over 24 hours before Irene moved up the Florida coast. Based on the number of hatched shells (and one live hatchling!) that were documented when the nest was excavated, seventy-six hatchlings emerged from this nest. The second nest was evaluated on August 30th, after the hurricane had moved past Florida. Conditions along the shore were noticeably altered after the storm’s passing, particularly in the amount of sand that had been deposited up and into the foredunes. Turtle nests that had been marked with stakes, signs, and flagging were in some cases completely unmarked, while others that appeared less damaged, now had sand piled and compacted up to near the top of the stakes. It was evident that heavy surf had thoroughly inundated each of the remaining eight nests in the park.

Most damaging to the emerging hatchlings of the second nest was this extra compacted sand over their nest. As park staff dug into the nest, they eventually came upon 117 dead hatchlings that had suffocated as they tried to make their way to the surface. Below them, about two and a half feet down, was the egg chamber. Nearly all of the eggs, save five, had hatched. While hurricanes are natural events, and sea turtles have coexisted with them for millions of years, climate change is very likely exacerbating both the frequency and intensity of major storms. If climate change is caused by human activities, as most research shows, humans are therefore contributing to the further plight of sea turtle species whose global population numbers are already dangerously low.

Least Tern Colony

The least tern seabird colony (Wilson’s plovers nest within the same colony) has seen another breeding season come to an end. At its height in May the colony supported sixty-five tern nests. This number is down significantly from previous years in terms of the area within Fort Matanzas National Monument. The birds, though, have little respect for jurisdictional boundaries, and the majority of the colony took up residence to the south of the inlet on county property. The colony in the park proper did produce at least four tern chicks, and three of these were last seen as fledglings. (Fledglings have been notoriously difficult to confirm, based on previous years’ data sheets.)

Perhaps to help make up for the relative paucity of tern nesting, the Wilson's plovers had a record nesting year. Four nests were confirmed, which produced six chicks, of which five were confirmed fledglings. Park staff members must now perform the twice annual task of taking down all the colony posting signs and replacing them with dune conservation signs. Thankfully, though, the weather is turning slightly cooler, and another hot, humid summer field season is coming to a close.